



Heat Injury Prevention Chart
Including Fluid Replacement Guidelines for Hot Weather Training

		Acclimatized soldier wearing BDU						Additional controls are required for personnel not acclimatized
Heat Category	WBGT Index, °F	Easy Work		Moderate Work		Hard Work		
		Work / Rest	Water Intake (qt / hr)	Work / Rest	Water Intake (qt / hr)	Work / Rest	Water Intake (qt / hr)	
1	78-81.9	NR	½ qt	NR	¾ qt	40/20 min	¾ qt	NR
2 (Green)	82-84.9	NR	½ qt	50/10 min	¾ qt	30/30 min	1 qt	Use extra caution when planning heavy exercise.
3 (Yellow)	85-87.9	NR	¾ qt	40/20 min	¾ qt	30/30 min	1 qt	Suspend strenuous exercise during the first weeks of training. Training activities may be continued on a reduced scale after the second week of training. Avoid activity conducted in direct sunlight.
4 (Red)	88-89.9	NR	¾ qt	30/30 min	¾ qt	20/40 min	1 qt	Curtail strenuous exercise for personnel with less than two weeks of hot weather training.
5 (Black)	> 90	50/10 min	1 qt	20/40 min	1 qt	10/50 min	1 qt	Physical training and strenuous exercise is suspended. (Any essential operational commitment, not for training, where the risk of heat casualties may be warranted, is excluded from this restriction.) Enforce water intake to minimize the possibility of heat injuries.

NOTES:

≡ **CAUTION: Hourly fluid intake should not exceed 1½ quarts.**

≡ **CAUTION: Daily fluid intake should not exceed 12 quarts.**

CONTINUES ON BACK OF CARD



CONTINUATION

- ≡ “Acclimatized” personnel are those who have worked in a given heat condition for 10 to 14 days.
- ≡ The “work / rest” times and “water intake qt / hr” (fluid replacement volumes) will sustain performance and hydration for at least 4 hours of work in the specified heat category. Individual water needs will vary approximately $\pm\frac{1}{4}$ quart / hour.
- ≡ “NR” means No Restriction to work time per hour.
- ≡ “Rest” means minimal physical activity (sitting or standing) in the shade, if possible.
- ≡ If personnel are wearing body armor, add 10⁰F to 20⁰F to the WBGT Index.
- ≡ If personnel are wearing MOPP over garment, add 10⁰F to the WBGT Index.
- ≡ Special physical training for personnel who are overweight, dieting, previous heat casualties, and un-acclimatized soldiers are more prone to heat injuries. Consequently, their activities must be closely monitored.

Some “Work” Examples

Easy Work	Moderate Work	Hard Work
≡ Walking on hard surface at 2.5 mph, ≤ 30 lb. load	≡ Walking on hard surface at 3.5 mph, < 40 lb. load	≡ Walking on hard surface at 3.5 mph, > 40 lb. load
≡ Weapon maintenance	≡ Walking loose sand at 2.5 mph, no load patrolling	≡ Walking on loose sand at 2.5 mph with load
≡ Manual of arms	≡ Calisthenics	
≡ Marksmanship training	≡ Patrolling	
≡ Drill and ceremony	≡ Individual movement techniques i.e. low-crawl, high-crawl, etc.	
	≡ Defensive position construction	
	≡ Field assaults	